```
;  LENGTH: 2335;
;  TYPE: DNA
;  ORGANISM: Homo sapiens
;  FEATURE:
;  NAME/KEY: gene
;  LOCATION: (1)..(2335)
;  NAME/KEY: CDS
;  LOCATION: (83)..(2170)
US-09-492-361-1

Query Match    13.9%;   Score 518.4;  DB 3;  Length 2335;
Best Local Similarity  60.1%;  Pred. No. 1.6e-140;
Matches 1103;  Conservative  0;  Mismatches 566;  Indels 165;  Gaps  8;
```

```
Qy    201 TACGGGACGCGGGGCAGAACTACGTGACACGGGGGAGGACCCCGCGGGGTTC 260
          ||||| |  | || |   |   ||| | ||    |  ||   |  ||    |||
Db    320 TACGGCCGCCGCTGACAGGGTCTACAAACGTGCTGCTGGAGGACCCCGGCCTTC 379

Qy    261 ATCTACCACGGCCTTTCGTTTTTCTCCCTGTCGTTTGGTTCTTGATTTGTTTCTGTTTTTCT 320
          ||  | |   | ||| |  |||| | |  |   |||||   |  |  |  ||| || |||||
Db    380 GTCTACCAAGTGTCTTCATATTTTGTCGTCTTCAGCTGCTCTGGTGTCTGTCTGTGTGTGTCC 439

Qy    321 ACCATCCCTGAGCACACAAAAATTGGCCTCAAGTTGCCTCTTGATCCTGGAGTTCGTGATG 380
          || | ||  |  |     || |  | ||  ||||   |||  | |    || |||| ||| |
Db    440 ACTATCCAGGAGCAACCTGGGACGTGTCTCCTCATCTGTTGGAATTCGGTGAG 499

Qy    381 ATTGTGTCTTTGGTTTGAGTTCAATCGGTTCTGGGGGTTGCTGTTTGTCGA 440
          ||  ||   ||  || |||||| | | | || ||||||| ||   |  | |
Db    500 ATCGTGGTTTTCGGCCTTGGAGTACATCTCCGGGGTCTCGGGGGATGCTGCTGCCGC 559

Qy    441 TATAGAGGAATGGGCAAGGAGGAGACTGAGGTTTGCTGCTGAAAAGCCCTTCTCTGGTTTTATAGATACC 500
          ||||| | ||  | | | |  | || | |   || | | |  ||  |   | | | |||| | ||| ||
Db    560 TACCGACGATGCCAGGGGTCCTTCCCGCTTCCCGGATCTGTGTGTCATCGACTTC 619

Qy    501 ATTGTTCTTATGCGTCAATACCAGTTGTTTTGCGCAAAAACTCAGGGTTAATATTTTTGCC 560
          ||  |  |  | ||| ||| | ||| | ||| | | ||  || | || | | || ||| |
Db    620 ATCGTGTTCTTGCTTGCGGCCTCCGGTCACCGCCGGGTACCGGGGCAACATCTTCGGCC 679

Qy    561 ACGTCTGCACTCAGAAGTCTCCGGTTCCCTACAGATCCTCCGGCAGTGGTGGCATGGACCGA 620
          || | || || || | |||| | ||| |  ||| | | || || || |||| ||||  |||
Db    680 ACGTCCCGGCTGCCAGCATGCGGCTTCCTGCGAGATCCTGCGCCATGGTGCCGCGATGGACCGC 739

Qy    621 AGGCGAGGGCACTTGGAAATTACTGGGTTCAGTGGTTTATGCTCACAGCAAGGAAGTAAATC 680
          || | ||  || |    ||  | ||||  ||||| | || | | | || || ||   || |
Db    740 CGGCGGCGCACCTGGAAGCTGGTCGGGCTCCAGTGGTCAAGGAGGAGCTGATC 799

Qy    681 ACAGCTTGGTTACATAGGATTTTTGGTTCTTTATTTTTTCCTTGTCTATCTGGGTG 740
          || |  |||| | |  ||| |   ||||| ||   || | |||| | | | |||||
Db    800 ACCGCCTCGTTACATCGGGCTTCGCCTCTTCCTTCCTCGGTCTTACCTGGCC 859

Qy    741 GAAAAGGATGCCAATAAAGAGTTTTCTACATATGCAGATGTGCTCTCGTTGGGCACAAATT 800
          || || ||||| |||| |  | ||| |||| | | |||| || | ||  |  | | |||||
Db    860 GAGAGGACGCCAACTCGCAGTTCTCCCTAGCCGACTCGGCTCTCTGTGTGCTCGTGTGGGGACGATT 919

Qy    801 ACAATTGACAACTATTGGGCTATGGAGACAAAACTCCCCTAAC 860
          || | ||| |  | ||||| | | | || |  || ||| ||
Db    920 ACATTGACAACCATCGCTGCTATCGGTACACCGGCAAGGGTCCTGGGGAAGATTGCTT 979

Qy    861 TCTGCAGGCTTTGCACTCCTTGGCATTTCTTTCTTTGCC 920
          | ||||| |||||||| |||  | || |    ||| |
Db    980 GCCTGCTGGGCCTGGGCATCCTTAGGC 1039

Qy    921 TCAGGTTTCGATTAAAAGTAGACACTTTTGAGAAGAAAGG 980
          |  | ||| | ||| |  | |  | | |  ||  | ||
Db   1040 AACCAGTCGTGCCAACCCATTCAGTTGTTTACGCAGCTGCTGATGGAGAAGCGGAGG 1099

Qy    981 AAECCAGTCGTGCCAACC 1040
          |||||||||||||||
Db   1100 ATGCCGGCAGCCAACCTCATCCAGGCTGTACTGGCTGATGAGCCG 1159

Qy   1041 GTTTCCATTGCAACCTGGAAGCCACACTGGAGTCTTGCAGCTGCAGC------------ 1091
          |  | |  |  | | ||| | ||||||
Db   1160 GCCTACTGACAGCCACCTGGTACTACTATGACAGTATCCTCCGATCCATCCTTCTTCAGAGAGCTG 1219
```

```
Qy   1092 CCTACCAAGAAAAGACAAAGGGGGAGAGCATGAAGCAGTCAGAAGCTA---------- 1136
          |  |  | | | | | | | |  |    | | |  | |  |   | |
Db   1220 GCCCTCTTGTTTTGAGCGATGCAACCGGGCGCAATGGGGGCCTTACGGGCCCCTGGAGGTG 1279

Qy   1137 ---------------------------------------------------- 1136
Db   1280 CGGCCGGCGCCGCCGGTACCCGACGACGACCTTCCCGTTACCCGCCCCGTTGCCACCTCCCAC 1339

Qy   1323 TCTCAGCCAAAACCAGTGATGATAGATGCTGACACAGCCCCTTGGCACTGATGATGTGATAGATGAT 1382
          |    |   |  |  |  | | | |  ||  |||   |   |  |  |  |   |  |  |
Db   1574 ----AAACCCGCACCTCTGCTGAGGATGCCC-----CCTCAGAGGAAGTAGCAGAG 1621

Qy   1383 GAAAAAGGATGCCAGTGGTGTGATGTATCAGTGGGAAGACCTCACCCCACCACTTAAAACTGTC 1442
          |||||| ||||| ||||  || ||| |  ||  | |  | |  | | || | |||| |  | |
Db   1622 GAGAAGACTACCAGTGTGACGAGCTCACCGGTGGCGACAACATCATGCCTGCTGTGAAGACAGTC 1681

Qy   1443 ATTCGGAGCTATCAGAATTATGAAATTTCATGTTGCAAAAACCGGAAGTTTAAGACATTA 1502
          |  |  | | | |||| | | ||  || |  | || | ||  || | || || |  || |
Db   1682 ATCCGCTCCATCGAGGATTCTCAAGTTCCCTGGTGGCCAAAAGAAATTCAAGGAGAGCAGTG 1741

Qy   1503 CGTCCAATATGAGTGAAGTTCATTGGAACAAATTCTGTGGTCATCTGACATCTGTTG 1562
          | |  |   |  || | ||||  ||||  |  | |  |  | | ||| |  |  || |
Db   1742 CGACCGTACGACGTGAAGGAGGTCATGGAAGACGGTGGCAGTCCATCGAGCACAGTG 1801

Qy   1563 TGTAGAATTAAAAGCCTTCAAACACGTTGATCAAAATTCTTGGAAAAGGGGC------AAATC 1619
          |  |   ||  ||  | ||  | ||  || ||   | | |  ||  | || |
Db   1802 GGCCCGGATCAAGAGCCTGCGAAACTCGGGTCGGAAAATTGTGGGTGGGGGCCCCGGGGAC 1861

Qy   1620 ACATCAGATAAGAGAGAGGCCGAGAGAGAAAAATAACAGAGAAAAATCGGGTCTC 1679
          |   |  | | | | | | || | |  | ||  | | || || |  | | | | |
Db   1862 AGGAAGGGCCCGGCAGGGCGACAAGGGGGCCCTCCGACGGGAGGTGGGATGGAGAAAATC 1921

Qy   1680 AGTATGCTCGGGTCGGGTTGTGTCAAGGTTGAAAAACAGGTACAGTCCATAGAATCCAAGCTG 1739
          || | || |||| ||| | |  | ||| | ||   | || || || || | |  | |||| |
Db   1922 AGCATGAATGGGACGCGTGCTCAAGGTGCAATGGTGCAGGTCCATCGAGCACAGAGTG 1981

Qy   1740 GACTGCCTACTAGACATCTATCAACAGGTTCCTTGGAAAAGGCCTCTGCCTCAGCCCTGCCT 1799
          || | ||  | | | | | || ||  | |    ||  | |   | |  || | |  | | |
Db   1982 GACCTGTTGTGGGGTTCTACTTCATTCGGACGCTGCCTGC------GCTCTGGCCACCTGGCCAGC 2035

Qy   1800 TTGGCTTCATTCCAGATCCCACCTTTGAATGTGACAGAGCATCTGACTATCAAAGCCCT 1859
          |  |  | ||| |  | |  | | |||| | |  |||| | |  | ||| |  | ||| |
Db   2036 CTGGGGCCCGGTGCCAGTGCCGCCGGCTGTTCGACGACATCACCTCCGACTACCACAGCCCT 2095

Qy   1860 GTGGATAGGCAAAGATCTTTTGGGGTTCCGCACAAA 1893
          || | |  | ||| | | |  |||  | ||| ||
Db   2096 GTGGAGGACGGAGGACAATCTCCGTCTCCGCACAGA 2129
```

RESULT 9
US-09-495-050A-303

```
;  Sequence 303, Application US/09495050A
;  Patent No. 6492505
;  GENERAL INFORMATION:
;  APPLICANT: Roopa, Reddy
;  APPLICANT: Guegler, Karl, J.
```

; APPLICANT: Aul-Young, Janice
; TITLE OF INVENTION: COMPOSITION FOR DETECTION OF GENES ENCODING MEMBRANE-ASSOCIATED P
; FILE REFERENCE: PA-0043_US
; CURRENT APPLICATION NUMBER: US/09/495,050A
; CURRENT FILING DATE: 2000-01-31
; PRIOR APPLICATION NUMBER: 60/118,318
; PRIOR FILING DATE: February 1, 1999
; NUMBER OF SEQ ID NOS: 305
; SOFTWARE: PERL Program
; SEQ ID NO 303
; LENGTH: 582
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. 6492505 4970006CT1
US-09-495-050A-303

Query Match   13.8%;   Score 511.4;   DB 3;   Length 582;
Best Local Similarity   99.6%;   Pred. No. 7.2e-139;
Matches 523;   Conservative   0;   Mismatches   1;   Indels   1;   Gaps   1;

```
Qy 1605 GGAAAAGGGCAAATCACATCAGATAAGAGAGAGCCGAGAGAAAAATAACAGCAGAACATGAG 1664
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1 GGAAAAGGGCAAATCACATCAGATAAGAGAGAGCCGAGAAAAATAACAGCAGAACATGAG 60

Qy 1665 ACCACAGACGATCTCAGTATAGTGTCGGGTCGGGTGGGTCAAGGTTACAGGTACAGTCC 1724
        |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   61 ACCACAGACGATCTCAGTATAGTGTCGGGTCGGGTGGGTCAAGGTTGAAAAACAGGTACAGTCC 120

Qy 1725 ATAGAATCCAAGCTGACACTGCCTACTACTAGACAATCTATCAAACAGGTTCCTTCGGAAAGGCTCT 1784
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  121 ATAGAATCCAAGCTGGACTGCCTACTAGACAATCTATCAAACAGGTTCCTTCGGAAAGGCTCT 180

Qy 1785 GCCTCAGCCCTTGGCTTTGGCTTCATTCCAGATCCCACCTTTTGAAATGTGAACAGACATCT 1844
        |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  181 GCCTCAGCCCTTGGCTTTGGCTTCATTCCAGATCCCACCTTTTGAAATGTGAACAGACATCT 240

Qy 1845 GACTATCAAAGCCCTGTTGGGATAGCAAAGATCTTTCGGGTTCCGACACAAAAACAGTGGCTGC 1904
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  241 GACTATCAAAGCCCTGTTGGGATAGCAAAGATCTTTCGGGTTCCGACACAAAAACAGTGGCTGC 300

Qy 1905 TTATCCAGATCAACTAGTGCCAACATCTCGAGAGGCCTGCAGTTCATTCTGACGCCAAAT 1964
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  301 TTATCCAGATCAACTAGTGCCAACATCTCGAGAGGCCTGCAGTTCATTCTGACGCCAAAT 360

Qy 1965 GAGTTCAGTGCCCAGACTTTTCTTACGGCCTTAGCCCTTACTAGTCACGTCAAGCAACACAG 2024
        |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  361 GAGTTCAGTGCCCAGACTTTTCTTACGGCCTTAGCCCTTACTAGTCACGTCAAGCAACACAG 420

Qy 2025 GTGCCAAATTAGTCAAAGCGATGGCTCAGCAGTGGCAGCCACCAACACCATTGCAAACCAA 2084
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db  421 GTGCCAAATTAGTCAAAGCGATGGCTCAGCAGTGGCAGCCACCAACACCATTGCAAACCAA 480

Qy 2085 ATAAATACGGCACCCAAGCCAGCAGCGCCCCAACAACTTTACAGATC 2129
        |||||||||||||||||||||||||||||||||||| ||||||||||
Db  481 ATAAATACGGCACCCAAGCCAGCAG-CCCAACAACTTTACAGATC 524
```

RESULT 10
US-09-177-650-88
; Sequence 88, Application US/09177650
; Patent No. 6413719
; GENERAL INFORMATION:
; APPLICANT: Leppert, Mark F.
; APPLICANT: Singh, Nanda
; APPLICANT: Charlier, Carole
; TITLE OF INVENTION: KCNQ2 AND KCNQ3 - POTASSIUM CHANNEL GENES WHICH ARE
; TITLE OF INVENTION: MUTATED IN BENIGN FAMILIAL NEONATAL CONVULSIONS (BFNC)
; TITLE OF INVENTION: AND OTHER EPILEPSIES
; FILE REFERENCE: 2323-134
; CURRENT APPLICATION NUMBER: US/09/177,650
; CURRENT FILING DATE: 1998-10-23

; EARLIER APPLICATION NUMBER: 60/063,147
; EARLIER FILING DATE: 1997-10-24
; NUMBER OF SEQ ID NOS: 129
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 88
; LENGTH: 2273
; TYPE: DNA
; ORGANISM: Mus musculus
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(2271)
US-09-177-650-88

Query Match   13.8%;   Score 511.4;   DB 3;   Length 2273;
Best Local Similarity   59.4%;   Pred. No. 1.7e-138;
Matches 978;   Conservative   2;   Mismatches   595;   Indels   72;   Gaps   4;

```
Qy 189 CGCAACGTCAAGTACCCGGCGGGGGTGCAGAGAACTACCCTGTACAACGTGCTGGAGAGACCCCGC 248
       ||||||| |||| |||| ||  ||||||  |||||||   | | ||| |  | |||||||||||||
Db 208 CCGAACGCCTTCTACCGGCAAGCTGCAGAATTCCTCTACCAACGTTGCCTTGCTTGATCCGC 267

Qy 249 GGCTGGGCGCGTTCATCTACCACCGCTTCACCGCCTTTCGTTCTTCCTTTGGTTTGCTTGATTTG 308
       ||||  | | ||||| |  || || |||| |||| ||| |  ||  || || || | | ||||||
Db 268 GGCCAACGCCTTCTACCGGCAAGCTGCAGAATTCCTCTACCAACGTTGCCTTGCTTGATCCTG 327

Qy 309 TCAGTGTTTTCTACCATCCCTGAGCACACAAAATTGGCTCAAGTTTTCTCCTCTTGATCCTG 368
       |||| |||||||  | ||| ||||| || || |||| ||||||||| || | ||  ||||||
Db 328 TCTGTGTTTTCCACCATCAAGGAGTACGAGAAGAGTCTGAGGGGGGCCCTTACACTCTTG 387

Qy 369 GAGTTCGTTGATGATTGTCGTCTTTGGTTTTGGAGTTCATCAGATCCGGTCTGGCGGGT 428
       ||||| | |||| ||| || ||  || ||  ||||| ||||  |   ||| ||| |||
Db 388 GAAATCCGTGACTAGTCGTGGTTAATTCGGTTGTTGAGTTACTTTGTGAGGATCTGGGGGT 447

Qy 429 TGCTGTTGTCGATATATAGAGAGATTGGAAGGGAGGAGACTGAGGGTTTGCTGAAAGCCCTTCTGT 488
       | | || | |||| ||| |||| | ||| |  |  ||| || | ||||| | ||  | |||| |
Db 448 TGCTGTTGCCGGTATCGAGGTTGGGGAGCGCTCAGAGTTTGCCAGGAAGCGCGTTCTGT 507

Qy 489 GTTATAGATACCATTGTTCTTATCGGCTTCAATAGCAGCAGTTGTTTTCTGCAAAAACTCAGGGT 548
       | ||| |||  || | ||| | ||||||||||||||||||||||||||||||||||||||||||
Db 508 GTGATTGATATCATGCAGTCGATTGCCTCCATTGCTGTTGGCAGTCTCCAGGGC 567

Qy 549 AATAATTTTTGCCACGTCTGCACTCAGAAGATCTCCGGTTCCTACAGGATCCTCCGGATGTG 608
       |||| | || |||| || | ||||||||||||||||  ||||| | | ||||  || ||||
Db 568 AATGTCTTGCCACATCCGTCTTCGGAGTCGCTTGCTACGATCTCCGGGTTATGCTCACAGC 627

Qy 609 CGCATCGGACCGAAGGGGAGGGGAGGGCGCTTGGAAATTACTGGGGTTTCAGTGGTTCATCGACAGC 668
       |||||||||||||||||||||||||| || || || || | || |||| |||| | ||| |||||
Db 628 CGTATCGGACCGGAGGGGTGGGCACCTCGAGCTTCGGACGCTCTTACGGCTACAGC 687

Qy 669 AAGGAATTAATCACAGCACTTTGGTTACAGCTGAGATTTTTCGTTCTTATTTTTTCGTCTTTCCTT 728
       |||||| ||  ||  |||| ||  |||| ||| || ||  | ||   || | | | |||||  ||
Db 688 AAGGAGCCTGGTGACTGCCCTGGTACATTGGCTTCCCTCATCCTCATTCCTG 747

Qy 729 GTCTATCTGGTGGAAAAGGGATGGCCAAATAAAGAGATGTTCTCACGATAATGCAGATGCTCTCTGG 788
       | | ||  ||||| | ||| ||| |  |||   |||| || | || | || ||  || | ||||||
Db 748 GTGTGACTTGGCCAGAAAAGGGGTGAGAATGACCACTTTGACCTACCGCGCATGGACTTCTGG 807

Qy 789 TGGGGGCACAATTACATTTGACAAACTATTAGGCTATGGAGGACAAAGTGAACTCCCTAACTGGGCTG 848
       |||| | || |  ||| |||| ||| | |  || ||||| ||| |||  |||| || |  ||| |
Db 808 TGGGGTTCTGATCACCCTGACGACCAATTGGGTACGGGCAGCAAAGTACCCTAAGACTGGGAAC 867

Qy 849 GGAAGAATTGCTTTCTGCAGCCTTTGCACTTCCTTGGGCATTTTCTTTTTCTTTGCACTTCCTGCC 908
       ||||||| | || | |||  || |  |||| | | |||| | || | | | ||| |||| | | |
Db 868 GGGGACGTGCTGGGCACGACCTTTACCCTGCTTTACCTCATTGGTTCTCGGTTCTTCCGGCT 927

Qy 909 GGCATTCTTGGCTCAGGTTTTTGCATTAAAAGTACAAGAACAACACACGCCACAGAAACATTT 968
       |||| || | ||| || | ||| ||||  | |||| | || ||| | | | | || |||||
Db 928 GGCCATTTTGGGATCCGGCTTTGCCCTGAAAGTCCAGAGACAGCATCCGCAAAACAGCTTT 987

Qy 969 GAGAAAGAAGAGGAAACCCAGCTGCCAACCTCATTCAGTGTGTTTGGGGCTAGTTGACGGCAGCT 1028
       ||||| || | || ||| | | ||| |  ||| | ||||| | | |||| | || | | |||
Db 988 GAGAAACGGCGGAACCCTGCGGGCAGTCGACTGTGTTGGGGCTAGTTACGCGTAGT 1047
```